AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A ~~flexible distribution device used in a~~ base station for <u>receiving</u> <u>a transmitted signal from a mobile device</u>~~rake receivers distribution to receive a transmitted~~ ~~signal emitting from a mobile device~~, comprising:

a master processing unit<u>;</u> ~~for assigning an appropriate number of rake receivers for~~ ~~receiving said transmitted signals; and~~

a ~~plurality of~~<u>first</u> processing unit<u>unit</u>s connected with ~~said~~<u>the</u> master processing unit, ~~each processing unit~~ comprising:

a plurality of <u>first</u> rake receivers for receiving ~~said~~<u>the</u> transmitted signal ~~and outputting a~~ ~~recovered signal through a recovery process~~; and

a <u>first</u> detecting unit for receiving ~~said~~<u>the</u> transmitted signal and outputting a <u>first</u> detection signal;<u> and</u>

<u>a second processing unit connected with the master processing unit, comprising:</u>

<u>a plurality of second rake receivers for receiving the transmitted signal; and</u>

<u>a second detecting unit for receiving the transmitted signal and outputting a second</u> <u>detection signal, the first detection signal being larger than the second detection signal;</u>

wherein ~~said~~<u>the</u> master processing <u>unit</u> estimates ~~said~~<u>a</u> signature appropriate number (SAN) <u>of rake receivers for receiving the transmitted signal</u> according to the ~~qualities of said~~<u>the</u> <u>first</u> detection signals and <u>the second detection signal</u>~~integrates said recovered signals into a~~ ~~compound signal~~ <u>and assigns the transmitted signal received by the second rake receivers when</u> <u>there are not enough first rake receivers in the first processing unit</u>.

2. (Currently Amended) The <u>base station</u>~~device~~ of claim 1, ~~wherein said~~<u>the</u> master processing unit further comprising:

a distributor for receiving ~~said~~<u>the</u> <u>first and second</u> detection signals from ~~said~~<u>the</u> <u>first and</u> <u>second</u> processing units, and estimating ~~said appropriate number~~ SAN;

a master combiner connected with ~~said~~<u>the</u> distributor and ~~said~~<u>the</u> plurality of processing units, the master combiner receiving ~~said~~<u>a plurality of</u> recovered signals of ~~said~~<u>the</u> <u>first</u> rake

receivers ~~and/or~~ the second rake receivers and combining ~~said~~the recovered signals into ~~said~~a compound signal.

3. (Currently Amended) The base station~~device~~ of claim 2, wherein ~~said plurality of processing units further comprising~~:

a ~~the~~ first processor, ~~comprising~~comprises R1 first rake receivers;

~~a~~the second processor, ~~comprising~~comprises R2 second rake receivers;

wherein ~~, said rake receivers within said first processor and said second processor are assigned selectively for said transmitted signal receiving by said distributor, and the method of assigning comprises~~:

when SAN is smaller than R1, ~~the numbers~~R1 of the first rake receivers are assigned for receiving the transmitted signal~~within said first processor that equals to said SAN are employed~~;

when ~~said~~ SAN is larger than R1, ~~but~~and smaller than (R1+R2), ~~said~~the R1 first rake receivers within ~~said~~the first processor and (SAN-R1) second rake receivers within ~~said~~the second processor are ~~employed~~assigned for receiving the transmitted signal~~employed~~;

when ~~said~~ SAN is larger ~~the~~than (R1+R2), ~~said~~the distributor searches rake receivers located within other processing ~~unit~~units for assigning.

4. (Currently Amended) The base station~~device~~ of claim 2, wherein ~~said~~the distributor selects ~~a~~the first processing unit with high priority, ~~said~~the first processing unit having better quality of its detection signal.

5. (Currently Amended) The base station~~device~~ of claim 1, ~~wherein said~~the first processing unit ~~further comprising~~comprises:

a combiner connecting with ~~said~~the first rake receivers, ~~said~~the combiner receiving ~~said~~the recovered signals and integrating recovered signals which originated from the same source, then outputting to ~~said~~the master processing unit.

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6. (Currently Amended) The base station~~device~~ of claim 1, wherein ~~said~~the first detecting unit is a matched filter.

7. (Currently Amended) A ~~flexible distribution~~ method for assigning rake receivers for ~~distributing rake receivers to achieve an optimal usage of rake receivers within~~ a base station, ~~while utilizing said~~the base station ~~to receive~~ receiving a transmitted signal ~~of~~ from a mobile station, and outputting a compound signal to a posterior circuit, ~~the distribution architecture for rake receiver of said~~the base station ~~comprises~~ comprising a ~~plurality of~~ first processing ~~units~~unit, ~~wherein each~~the first processing unit further ~~comprises~~ comprising a plurality of first rake receivers, the second processing unit further comprising a plurality of second rake receivers~~and a master processing unit~~, ~~said~~the ~~flexible distribution~~ method ~~for rake receiver comprises the following steps~~ comprising:

A: receiving ~~said~~the transmitted signal by ~~said~~the first processing unit and the second processing unit~~base station~~;

B: estimating a signature acknowledge number (SAN) of rake receivers by ~~said~~the master processing unit according to the quality of ~~said~~the transmitted ~~signal~~ signals received by the first processing unit and the second processing unit, the transmitted signal received by the first processing unit being larger than the transmitted signal received by the second processing unit ~~processing units~~;

C: assigning the transmitted signal received by the second rake receivers when there are not enough first rake receivers in the first processing unit~~determining whether the total number of rake receivers within every currently operable processing units is enough according to said signature acknowledge number, if yes, then execute step E, if not, then execute step D~~;

~~D: adjusting the number of operating processing units according to said signature acknowledge number;~~

~~E: integrating said signals received by said operating rake receivers with said master processing unit and outputting said compound signal to said posterior circuit and repeating from step A.~~

8. (Currently Amended) The method of claim 7, wherein ~~said~~the SAN is related to quality of transmitted signals which are received by ~~said~~the processing units.

9. (Currently Amended) The method of claim 7, wherein ~~said~~the step B further comprising:

B1: Evaluating quality of ~~said~~the transmitted signal received by ~~every~~ the first processing unit and the second processing unit;

B2: Arranging a sequence for selecting processing units according to quality of ~~said~~the transmitted signal received.

10. (Currently Amended) The method of claim 9, wherein said step D further ~~comprising~~comprises:

D1: Determining a first parameter as the number of rake receivers that are provided by the first processing unit in said sequence,

D2: Checking whether the SAN is larger than said first parameter or not; if yes, then execute D3, otherwise execute D4;

D3: Selecting another processing unit according to said sequence, and add ~~an~~a second parameter with the number of rake receivers which can be provided by thereof; following by the execution of D2;

D4: Among said processing units selected, only the last processing unit in the selective sequence employs the difference between the SAN and ~~the~~a master parameter as the number of rake receivers it ~~provided~~provides, the other processing units being selected ~~provides~~ provide all the rake receivers that it can provide.